Abstract

The present invention relates to a novel process for the preparation of high purity ziprasidone and pharmaceutically acceptable acid addition salts of ziprasidone; and solvates and hydrates thereof using novel intermediates and a purification method for ziprasidone and pharmaceutically acceptable acid addition salts of ziprasidone; and solvates and hydrates thereof.

Thus, 1-(1,2-benzisothiazol-3-yl)piperazine is silylated with trimethylsilylchloride in methylene chloride in the presence of triethylamine and the solvent is distilled off to obtain silylated 1-(1,2-benzisothiazol-3-yl)piperazine. The silylated compound is reacted with 5-(2-chloroethyl)-6-chloro-oxindole in the presence of sodium carbonate to obtain ziprasidone.